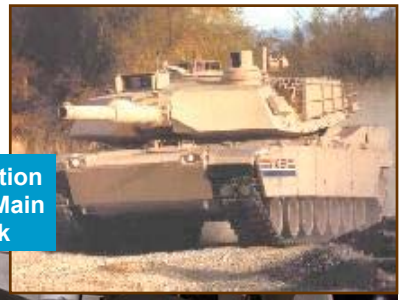
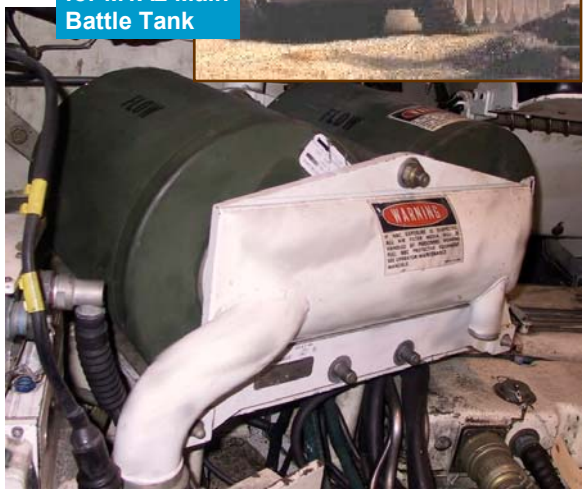
Applications:

M93 Gas-Particulate Filter Unit



NBC Filtration for M1A2 Main Battle Tank



Ordering Data:

Gas-Particulate Filter, M48A1..... 4240-01-363-1311

Contact Item Manager for availability and current pricing information.

Size / Weight:

Exterior Dimensions (approximate): 12” OD x 14” H
Inlet Port: 3.5” ID
Outlet Port: 4.25” ID
Item Weight: 28 lbs
Packaged Weight: 30 lbs

For Additional Information, Contact:

Item Manager: Soldier, Biological and Chemical Command
Attn: AMSSB-HB (RI), Rock Island, IL 61299-7390
Phone: (309) 782-6609 or (309) 782-5455

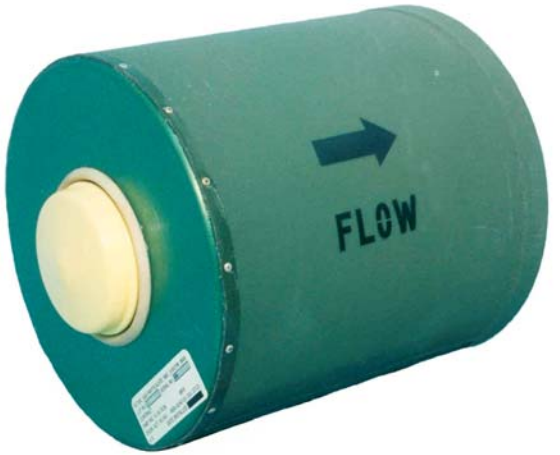
Materiel Developer: Edgewood Chemical Biological Center
Attn: AMSSB-REN-P, APG, MD 21010-5424
Phone: (410) 436-5682 or (410) 436-5512

Or Email:

Chemical Biological Protective Shelter (CBPS)

SBCCOM
U.S. Army Soldier and Biological Chemical Command
Aberdeen Proving Ground, Maryland 21010-5424

M48A1 Gas-Particulate Filter, 100 CFM



NBC Gas-Particulate Filtration

Use/Function:

The 100 CFM M48A1Gas-Particulate Filter provides a source of clean air, protecting against chemical/biological warfare agents and radiological particles. The versatile M48A1 filter is used in a variety of filter/blower applications designed for in-line airflow patterns, including the M93 Gas-Particulate Filter Unit (GPFU), the M1A2 Main Battle Tank, and the Chemical Biological Protected Shelter (CBPS).

Physical Description:

The 100 CFM M48A1 Gas-Particulate Filter is a 2-stage filter with integral particulate and gas filter elements. Air flows in a radial pattern through the concentric cylinder-shaped filter elements. The filter set measures approximately 12" OD x 14" H and weighs 28 lbs unpackaged.

*Contaminated air flows into the filter through a 3.5" ID **Inlet Port** and is then directed through the 100 CFM **Particulate Filter Element**. The particulate filter element contains a High Efficiency Particulate Air (HEPA) filter media. The HEPA media is pleated to maximize surface area for collecting sub-micron size particles, such as biological and radiological particles. The partially filtered air then flows through the 200 CFM **Gas Filter Element**, which contains a tightly-packed bed of activated carbon impregnated with copper, silver, zinc and molybdenum salts, and triethylenediamine (ASZM-TEDA). The ASZM-TEDA carbon adsorbs chemical agent vapors and aerosols. The filtered air flows around the outside of the gas filter element, directed toward the filter's 4.25" ID **Outlet Port.***

Design Characteristics:

- *100 CFM radial airflow pattern through integral particulate and gas filter elements.*
- *Rugged, aluminum filter housing with CARC-painted exterior surfaces.*
- *Standardized size, making it useable in a variety of filtration applications.*
- *Effective filtration at temperatures ranging from –60°F to +160°F.*
- *Filter components and filter media materials are resistant to fungus and mildew.*
- *5-year extendable shelf life.*

ECBC
Edgewood Chemical Biological Center

M48A1 Gas-Particulate Filter
Components and Features